

18. (Three Times Amended) A semiconductor device comprising:

21 a semiconductor element having a surface on which electrode pads connected to an internal part of the semiconductor element and protruding electrodes to be connected to an external part are formed;

22 lead lines each connecting one of the electrode pads and one of the protruding electrodes so that the protruding electrodes and the internal part are connected through the lead lines; and

23 a resin layer which is formed on the surface of the semiconductor element and seals at least a lateral surface of the protruding electrodes;

24 wherein the lead lines are located between the semiconductor element and the resin layer.

36. (Twice Amended) A semiconductor device comprising:

37 a semiconductor element having a surface on which electrode pads connected to an internal part of the semiconductor element and external connection electrodes are provided which are to be electrically connected to external terminals;

38 lead lines each connecting one of the electrode pads and one of the external connecting electrodes so that the external connecting electrodes and the internal part are connected through the lead lines; and

42. a resin layer provided on the surface of the semiconductor element so as to cover the external connection electrodes,

wherein the external connection electrodes are exposed at a lateral surface of the resin layer and the lead lines are located between the semiconductor element and the resin layer.

42. (Three Times Amended) A semiconductor device comprising:

a semiconductor element having a surface on which electrode pads connected to an internal part of the semiconductor element and protruding electrodes to be connected to an external part are formed;

lead lines each connecting one of the electrode pads and one of the protruding electrodes so that the protruding electrodes and the internal part are connected through the lead lines; and

a first resin layer that is formed on the surface of the semiconductor element and seals lateral surfaces of the protruding electrodes; and

a second resin layer provided so as to cover at least a back surface of the semiconductor element;

wherein the lead lines are located between the semiconductor element and the resin layers.

43. (Three Times Amended) A semiconductor device comprising:

a semiconductor element having a surface on which electrode pads connected to an internal part of the semiconductor element and protruding electrodes to be connected to an external part are formed;

lead lines each connecting one of the electrode pads and one of the protruding electrodes so that the protruding electrodes and the internal part are connected through the lead lines;

a resin layer which is formed on the surface of the semiconductor element and seals lateral surfaces of the protruding electrodes; and

external connection protruding electrodes provided to the ends of the protruding electrodes exposed from the resin layer;

wherein the lead lines are located between the semiconductor element and the resin layer.

54. (Twice Amended) A semiconductor device comprising:

a semiconductor element;

protruding electrodes functioning as external connection terminals;

a wiring board having a flexible base on which leads are formed, the leads having ends connected to the semiconductor element and other ends connected to the protruding electrodes and the flexible base having a cavity in which the semiconductor element is placed; and

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a sealing resin sealing the semiconductor element,  
wherein there are provided extending portions that are formed to the wiring board so  
that the extending portions laterally extend from a position in which the semiconductor element is  
placed, the protruding electrodes being formed on the extending portions.

58. (Twice Amended) The semiconductor device as claimed in claim 57, wherein the  
semiconductor elements are connected to the electrode plate in a flip-chip bonding formation.

63. (Three Times Amended) The semiconductor device as claimed in claim 57,  
wherein the semiconductor elements are partially exposed from the sealing resin.

64. (Three Times Amended) The semiconductor device as claimed in claim 57,  
further comprising a heat radiating member in a position close to the semiconductor elements.

79. (Twice Amended) A semiconductor device comprising:  
a semiconductor device main body having a semiconductor element having a surface  
on which protruding electrodes are directly formed, and a compressed resin layer which is formed  
on the surface of the semiconductor element and seals lateral surfaces of the protruding electrodes;  
an interposer to which the semiconductor device main body is attached, the interposer  
being attached to a side of the protruding electrodes of the semiconductor main body, a wiring

pattern to which the semiconductor device main body is connected being formed on a base member of the interposer;

an adhesive which is provided between the semiconductor device main body and the interposer and which bonds the semiconductor device main body to the interposer;

17 Concl. a conductive member which electrically connects the semiconductor device main body and the interposer; and

external connection terminals which are connected to wiring pattern through holes formed in the base member and are arranged on a surface of the semiconductor device main body opposite to the surface on which the protruding electrodes are provided.

87. (Twice Amended) A semiconductor wafer on which semiconductor elements are provided, comprising:

25 a semiconductor wafer including a plurality of semiconductor elements having a surface on which electrode pads connected to an internal part of the semiconductor elements and protruding electrodes to be connected to an external part are formed;

lead lines each connecting one of the electrode pads and one of the protruding electrodes so that the protruding electrodes and the internal part are connected through the lead lines; and

a resin layer which is formed on the surface of the semiconductor elements and seals at least a lateral surface of the protruding electrodes;

wherein a lateral surface of the resin layer and a lateral surface of the semiconductor element have planes cut by a dicer, and the lead lines are located between the semiconductor element and the resin layer.

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lead lines each connecting one of the electrode pads and one of the protruding electrodes so that the protruding electrodes and the internal part are connected through the lead lines; and

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a resin layer which is formed on the surface on the semiconductor element and seals a lateral surface and a top of the protruding electrodes, the resin layer slightly covering upper portions of the protruding electrodes;

wherein the lateral surface of the resin layer and the lateral surface of the semiconductor element have planes cut by a dicer and the lead lines are located between the semiconductor element and the resin layer.

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97. (Twice Amended) The semiconductor device as claimed in claim 88, wherein the [compressed] resin layer is formed by disposing a film between the protruding electrodes and a mold, which thus contacts the resin layer through the film.

98. (Twice Amended) The semiconductor device as claimed in claim 88, wherein a sheet-shaped resin is used as the resin layer.

99. (Twice Amended) The semiconductor device as claimed in claim 88, wherein a reinforcement plate is loaded onto a mold before the substrate is loaded onto the mold in forming the resin layer.

100. (Twice Amended) The semiconductor device as claimed in claim 88, wherein:  
a film used in forming the resin layer is formed of an elastically deformable substance, and ends of  
the protruding electrodes are caused to fall in the film when the resin layer is formed by using a  
mold; and

the film is detached from the resin layer when the protruding electrodes are exposed  
so that the ends of the protruding electrodes can be exposed from the resin layer.

102. (Twice Amended) The semiconductor device as claimed in claim 88, wherein the resin  
layer comprises a plurality of sealing resins having different characteristics.